



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105

**OCT 18 2010**

Tim Coward, Renewable Energy Project Manager  
Bureau of Land Management  
P.O. Box 911  
Tonopah, NV 89049

Subject: Draft Environmental Impact Statement, Tonopah Solar Energy, LLC, Crescent Dunes Solar Energy Project, Nye County, Nevada (CEQ #20100343)

Dear Mr. Coward:

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the Tonopah Solar Energy, LLC Crescent Dunes Solar Energy Project (Project). Our review and comments are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) Regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

EPA provided scoping comments to the BLM in response to the Notice of Intent (NOI) for this Project on December 17, 2009. In that letter, we raised concerns about impacts to water resources, biological resources, and cumulative impacts associated with the potential development of multiple large-scale installations in the desert southwest. We remain concerned about these issues. We have rated the DEIS as Environmental Concerns - Insufficient Information (EC-2) (see enclosed "*Summary of Rating Definitions*"). Our detailed comments are enclosed.

We appreciate the opportunity to review this DEIS, and are available to discuss our comments. When the FEIS is released for public review, please send one hard copy and one CD ROM to the address above (Mail Code: CED-2). If you have any questions, please contact me at (415) 972-3521, or contact Jason Gerdes, the lead reviewer for this project. Jason can be reached at (415) 947-4221 or [gerdes.jason@epa.gov](mailto:gerdes.jason@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Kathleen M. Goforth", written over a horizontal line.

Kathleen M. Goforth, Manager  
Environmental Review Office

Enclosures: Summary of Rating Definitions  
EPA Detailed Comments

cc: Ron Wenker, U.S. Bureau of Land Management  
Ray Brady, U.S. Bureau of Land Management

**U.S. EPA DETAILED COMMENTS ON THE TONOPAH SOLAR ENERGY, LLC CRESCENT DUNES SOLAR ENERGY PROJECT DRAFT ENVIRONMENTAL IMPACT STATEMENT, NYE COUNTY, NEVADA, OCTOBER 18, 2010**

**Groundwater and Surface Water Resources**

One of the major concerns identified by EPA in our scoping comments for the Crescent Dunes Solar Energy Project (Project) was the potential impacts to water resources, particularly groundwater. While EPA is pleased that a hybrid cooling system (consisting of an air-cooled condenser with a wet cool augmentation system) is planned for the Project to reduce water use (with a small evaporative cooler to be used only at times of high energy demand), we remain concerned about the effect on existing groundwater supplies, as well as the potential for cumulative impacts over the life of the Project. Although the draft EIS states that the amount of drawdown for the Project (approximately 600 acre-feet per year) will “not result in wells going dry,” it also states that “some of the existing wells in the area will experience a drawdown of between 1-foot and 1.5-feet,” and that impacts to groundwater may include “well pumping causing drawdown” and “restrictions to existing well access or use.”

EPA is also concerned about the potential impacts to surface water associated with the Project, including “increased runoff flows, increased sediment transport, increased discharge and transport of contaminants, or possible affects to drainage paths or altered flow.” The EIS states that the stormwater drainage system would be “designed to allow the storm flow to follow its preexisting drainage paths,” yet later in the document, states that “increased runoff and sediment transport are expected to have a potential cumulative effect.”

***Recommendation:***

EPA recommends that BLM provide additional information in the FEIS explaining how the Project will affect water supplies for existing wells during its years in operation, as well as measures that could be taken to minimize or mitigate the impacts to these wells.

Additionally, we ask that BLM include a description of the long-term viability of the Project’s groundwater source, taking into account reasonably foreseeable projects planned for the area, as well as other factors, such as climate change, that may impact the Project and surrounding wells.

We ask that BLM include in the FEIS a discussion of the feasibility of recycling the water that would be sent to the evaporation pond and re-injecting or reusing this water.

EPA also recommends that BLM incorporate mitigation measures into the proposed Project sufficient to avoid potential cumulative effects from increased runoff and sediment transport. The Stormwater Pollution Prevention Plan (SWPPP) being developed to avoid these effects should be included in the FEIS.

## **Wildlife Resources**

EPA commends the work undertaken by the BLM to assess the risks to special status species from the Project. For the species highlighted in the DEIS, including Nevada oryctes, pale kangaroo mice, bats, golden eagles, and migratory birds, some mitigation measures have been prepared. These measures, such as covering the evaporation ponds with a porous screen, and, in the case of migratory birds, avoiding land clearing activities during the avian breeding season, should serve as crucial safeguards. But comprehensive mitigation plans for these species are characterized in the DEIS as “being developed” or “would be developed,” and are not included in the document, making it difficult for EPA to assess whether the mitigation measures planned for the Project will be sufficient to reduce potentially significant impacts.

### ***Recommendation:***

EPA recommends that BLM include comprehensive mitigation plans in the FEIS for the special status species located in the Project area.

## **Climate Change**

EPA commends the BLM for devoting a substantive section of the EIS to greenhouse gases (GHG), including detailed estimates of emissions from construction and operation of the Project. The EIS, however, does not include a discussion of the potential impacts of climate change on the Project. Considering the Project is planned to be in operation for 30, and possibly as many as 50 years, the EIS should include a description of how climate change may affect the Project, particularly groundwater resources.

### ***Recommendation:***

EPA recommends that BLM provide information detailing what impacts climate change may have on the Project, particularly sensitive species, its sources of groundwater, and reclamation and restoration efforts after construction and decommissioning.

## **Cumulative Impacts**

Another major concern identified by EPA in our NOI letter for this Project was the cumulative impact of multiple large-scale solar projects in the desert southwest, particularly potential impacts to water supplies, endangered species, and habitat. While BLM identified proposed projects in the cumulative effects study area (CESA), including a geothermal energy facility, two solar photovoltaic energy projects, a transmission line, and a mine, no description was provided of what the cumulative impacts may be from these and other reasonably foreseeable projects.

***Recommendation:***

EPA recommends that BLM provide additional information regarding the cumulative impacts associated with this and other large-scale renewable energy projects on various sensitive desert resources, including water supplies, special status species, and habitat.